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## THEIR UTILITY AND UTILITY IN RELATION TO THE MAJOR NETWORKS AND THE CHANGED INFORMATION SOCIETY

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### **ABSTRACT:**

*This articles identifies the changes that libraries and information centers (LICs) need to undergo for networking and lists the existing communication networks (INDONET, ERNET, NICNET,INET) and libraries and information networks (INFLIBNET, DELNET, CALIBNET, SIRNET, MALIBNET, MYLIBNET, BONET, PUNENET ) in India . It is mentions the paradigm changes that LICs undergo, challenges to their networking.*

**KEYWORDS:** *Library and Information Networks in India.*

### **1. INTRODUCTION:**

All the information networks of India are theoretically designed to strive for the development and progress of library and information science, and the objectives, goals etc. of all these systems have been set in such a way that each of the point is available in India. Prepare the small information resource for maximum use and make the system's user sit in its place. The desired information of the sitting can be made available in the shortest possible time and at the least cost.

Looking at the current global situation of India and the social , economic scenario of the world, based on the state of our nation , the future plans of the nation have also changed in the last 3 decades, changes in the way of implementing the plans has come. In order to implement and implement these ideas and plans well together in the whole nation, full information about each place of the nation and the information system of each place is required to function properly because only after maximum utilization of information resources , can complete development can be made. In order to complete the task of making the information resources of the nation the basis for future plans, the committees constituting each information system have divided their teams into small groups in such a way that for the purpose of establishing an information network, any small but

important points should not be ignored. Just as the function of blood circulation system in a person body is to transmit pure blood in the right amount at the right time to each organ can carry out its assigned work properly and overall the whole body can remain healthy, similarly the role of information systems of the nation is to make the nation healthy. In order to perform these types of role, it is necessary that each major work should be divided in to several smaller tasks according to the category and the interconnection of those works should also be kept in a smooth manner so that whenever the situation arises. According to him, there should not be any hindrance in working.

INFLIBNET, DELNET, CALIBNET, ARNET, NICNET, MALIBNET, and MYLIBNET etc. resume the Major information networks in India which are also comparatively broad in scope and which are basically powerful in strengthen library and information science in the nation, both internally and externally is trying. The basic objectives of all these networks are the same, but after analyzing the need and scenario of their area, they have determined their board objectives, goals and functions.

This is the reason why INFLIBNET has connected the major universities of India through information technology and simultaneously in the near future plans to links other disadvantages universities together. It is directly connected to the UGC so that no links is left to the universities of the nation. A national – computer – communication network will be established only after all the points are connected. This type of work can only be done by INFLIBNET because other networks have objectives according to their own scenarios. Being self- controlled it is free from external controls and that is why it is also able to take appropriate decisions with limit.

## **2. OBJECTIVES OF THE STUDY:**

- Preservation of ecological integrity with a view to providing continuing supply of life supporting resources
- Efficient and appropriate use of land
- Healthy living conditions
- Aesthetically pleasing environment
- Effective social , economics , and governmental institutions
- Improved human welfare in terms of minimal economic and social level
- Physical structure and adapted landscape of pleasing deign and
- Comprehensiveness that is full range of physical, biological and human factors in rural region.

## **3. HYPOTHESIS:**

In the presented dissertation, the research has presented as much as possible table, maps and pictures to clarify its thinking and analysis .Along with giving comparative details to clarify the subjects and purposes.

In order to make the entire nation healthy and fully develop, contact between all regions is

very important. For this, transmission of information is very important. Therefore, it is concluded from the point of view of each region that India needs library and information networks more acutely. After 200 years of independence and only 7 decades of independences, the hunger to become the same old cultural and knowledge power has awakened in India. To meet this new requirement, there is a need for library and information centers in the nation as well as coordination between these libraries and modern communication technologies have been accepted for establishing these networks because in the absence of modern communication technologies, no information network will remain active at high speed. It will not be able to function smoothly and information will not be able to reach the right place at the right time.

The library in India has faced for too many problems but the cooperation and financial support that the government of India has given to those library networks in the last few years, especially through NISSAT is commendable and it is also important for the development of the network. Due to this cooperation, the library information network in India is being taken more seriously.

This Information network not only connects libraries and information centers in India. Rather, they also work for their progress. They directly promote research in the field of library and information in this area.

For the competition of this international level, its becomes necessary that this progress be made for the research and research in every field, because the progress of those areas will directly affect the progress of the nation as well as the progress of library and information science. Changes through research related to other subject are conducted in form of information in the nation through the library itself. As much as research is needed in other subjects. Equally necessary is the library and information network to stand out from the competition. In order for international level information networks to complete, it is necessary that libraries in India can provide more and appropriate information to their Users. But for this to happens, it is very important to have good resource sharing among the library. This is the reason which is responsible for the existence of information network in India. These information networks would create favorable conditions by taking necessary collaborative steps to ensure adequate and balanced resource sharing among libraries present in India.

The main objective of the research study presented is whether the metropolitan networks and regional and national network are extending their support to the information society of India for the purpose of networking.

#### **4. RESEARCH METHOD:**

The study presented is a Survey- based micro- research of Historical method under which the utility of national networks systems in the context of India's changed information society has been created on the basis of the information and they have been classified and presented on the basis of



various places.

1. Contacting University Information center and obtaining information.
2. Surveying networks institutions and getting progress information.
3. To evaluate the states of the national networks against the international networks.
4. Collecting secondary data from newspapers and magazines.
5. Analyze available information and draw conclusion.

## **5. LIBRARY AND INFORMATION NETWORK IN INDIA:**

Every library and information network in India is unique in itself. because no network imitates each other but provides services to them according to the needs of their region and especially their users, all these network basically encourage research and research and encourage study, reading and reading but the special services provided by all of them are different from each other. For example, the software CALIBNET identifies is not made available by DELNET and those provided by DELNET are not made available by INFLIBNET. Similarly , annual sessions organized by everyone also focus on different topics with this , the people connected with these networks get different type of facilities and benefits from all the networks and thus these users have of their option exists to complete. In the modern era, computer communication system networks is a vivid vision of technological development, in which the communication and transfer of data is carried out through telecommunication. Dynamic and facilities the sharing of computer resources and hardware, software and proves highly useful in generating austerity in manpower. Telecom systems are constantly being developed in India, in which the role of computer and micro- computer is becoming very important.

In India, information network functioned as an information recovery network in the early stages with a great focus an accessing agriculture economics, social economics and administrative data. But agriculture, industry, water, electricity, oil, transport, health, education was considered more important.

### **5.1 INFORMATION AND LIBRARY NETWORK (INFLIBNET)**

INFLIBNET is an inter university center of university grant commission of India which is self- controlled in nature and is also located in the premises of Gujarat University in Ahmadabad. It was established in may 1991 as a program by the university grant commission. Its objectives is to established a national computer by connecting universities , colleges, university grants commission information centers , institutional of national importance , research and development institutions to each other and through this , Information control , guidance and information services are to be provided in the nations. It contributes to create a state of aggregation participation and maximum utilization of library resources in the country. This information through the technology of science, it is also working to modernize libraries and information centers of the entire nation.

It also performs information transfer throughout the nation and the same time it also

empowers academic environment, study – teaching and scholarship. After being established as a program in 1991, by 1996 it was established as a self contained inter- university center.

The national center of INFLIBNET is located at Gujarat University, Ahmadabad. Through this financial assistance is provided to a few selected university libraries every year for setting up computer sets, retro changes and networks. It also provides software for data entry and other library functions to its member libraries.

It emphasizes on collecting, sharing and maximizing all the information resources available in the nations. At present, the maximum emphasis is on computerization and modernization in the nation's university libraries as well as a major part of the INFLIBNET program. Under this development these members trained some special persons from the staff of libraries also provides the training program since 1992-93.

In addition to the training programs and modernization , its sets the standard for various categories of functions of member libraries , better and efficient steps for communication based services, better utilization of available information resources. And also makes proper network architecture.

#### **5.1.1 UGC INFONET DIGITAL LIBRARY CONSORTIUM:**

The UGC info net digital library consortium is a joint effort of INFLIBNET and the university grants commission to particularly implement the objectives of the establishment of INFLIBNET. It was formally launched in December 2003 by President Dr. APJ ABUL KALAM SAHAB and earlier, through the UGC info net program. Form was also made available to the internet in some university of India so that the digital consortium could be launched. Through this, member libraries provide 5000 journals and wadgamayi database, which are related to 23 publishers and various subjects. Through this, the member libraries saved from facing a problem called serial crises and at the same time they get many journals available above their researches benefits the spokesperson and member. In this test, Associate membership program has also been arranged for individual institutes and other research institutes so that they too can available this facility.

INFIBNET center has received 'jury choice award E India 2010' in under the category of 'digital learning through ICT in higher education institutes'

#### **5.1.2 SOULSOFTWARE:**

Library software soul (software for university library) created and developed by INFIBNET center is the most known and popular management software. And it has been installed in most of the universities; it has been installed in about 1688 libraries. Even the center had to open regional soul support service center to handle this .This center has opened, soul co-ordinates at different locations.

### **6. DEVELOPING LIBRARY NETWORK (DELNET):**

DELNET started in January 1988 in the library of international center of India and was

nominates as a society in 1992. NISSAT (national information system for science and technology)

Which is one of the department of scientific and industrial research (department of scientific and industrial research), government of India, and information technology, ministry of communication department national information center was also supported.

The main objective of the establishment of DELNET is to promote resource participation among member libraries. In addition to providing computerized services to the user it also perform the collection ,collection and transmission of information and at the same time it also tries to present duplication of information . In addition, DELNET also creates a federation list of resources of its member libraries, the main ones being as follows:

1. Union list of text.
2. Union list of current periodical
3. Union list of periodical
4. Database of India experts
5. CD ROM database
6. Database of periodical recording
7. Union list of video recording
8. Database of Urdu manuscripts
9. Database of thesis and dissertation

Database of publication in various languages using GIST technology. These entire databases are constantly updates. All these are stored on dell's which is Delnet own software.

Present the president of DELNET is Dr. Jayakumar and vice president is Dr.S.S. Murthy and director is Dr.H.K. Kaul. All these people are giving their valuable support in the development of DELNET and under their guidance, along with other work of DELENT, database is also growing and the collection of information is increasing in them. This is why they are proving to be useful to the users. The software dell sys in which all these database are stored in an RDBMS product delivered to DELNET by the information dimension corporate association of USA and is a courtesy of national information center , new Delhi to product provides a range of facilities to its institutional member as well as associate institutional member. Including e-mail, the efforts made by DELNET through its services are proving very useful in modernizing the libraries in India.

### **6.1 CALCUTTA LIBRARY NETWORK (CALIBNET):**

CALIBNET is an organization nominated under the west Bengal society nominates Act 1961 responsible for setting up my network of libraries and information centers in Kolkata. It is a project that NISSAT, which is the national scientific and technical information system and work for the department of scientific and industrial research of the government of India is providing force and has been set up by NISSAT itself. It was started on 21 Dec 1903. NISAT considered establishing a



network of scientific libraries in Calcutta calibnet was the first network that was depicted universally. Now this CD rogue.

CALIBNET provides online access to the co-database of its member libraries. Also build specialized database as per some requirement. They can be used by a member of calibnet through a network sitting at a remote location and also through its provides all kinds of information.

### **6.2 AHMADABAD LIBRARY NETWORK (ADINET):**

ADINET is network of libraries located in information around Ahmadabad; it was designated as a society in 1995. It was established in collaboration with NISAT, which is a part of the nation government department of scientific and industrial research. It was signed in Ahmadabad on the memorandum of understanding.

### **6.3 PUNE LIBRARY NETWORK:**

It is the library and information network of pune city. Currently, about 30 libraries and 10 professional are also connected through modem in punenet. The member libraries also take advantages of pune net provides the following database to its member.

- 1) Database of books of member libraries.
- 2) Database of union list of currently running periodical available in the libraries and information centers of pune city.
- 3) Database of international grants and following in medical science.
- 4) High-Data basic in bio-technology.
- 5) Access to NICNAT and access to the database available in NICNET such as medicine, AIDS database, mouse patent database etc.
- 6) Internet and access to database available on the internet.
- 7) Patent information database.
- 8) Federal list of books available In British libraries located in India.

### **6.4 BOMBAY LIBRARY NETWORK (BONET):**

BONET was established on 6 Nov 1992 at SCST (National center for software technology) in Mumbai. It was sponsored by NISAT the purpose behind its establishment was set up a low cost library and information network that was used to expand the library and information network in India and to encourage the general public to understand the importance of this service and use it.

BONET also has the support of ERNET (Education and research network) and UNDP (United national development program). It is primarily designed to establish collaboration between libraries and information centers in Mumbai and surrounding areas. It lays greater emphasis on resource sharing among libraries than on computerization. But it also does not completely ignore computerization but it also provides training for networking and computerization. It strives to speed up the computerization process libraries in Mumbai.

Membership of BONET provides easy access to centralized index to its member and also provides e-mail facility but also through ARNET to obtain library related services across India and outside India. The person can take the service of BONET.

#### **6.5 MYSORE LIBRARY NETWORK (MYLIBNET):**

It is the first library network in India that was established in a small town. In 1985, NISAT (National information system in science and technology national scientific and technical information system) in association with DSIR (DSIR department of scientific and industrial research department of scientific and industrial research) started planning that metropolitan city of India I also have such a library should be a network that is connected to the filed of science and technology and can operate resource sharing among the libraries associated with the same field so that the member books let can also prevent duplication of the same amount of book grant and at the same time it can better its acquired resources to use.

Prior to the inception of MYLIBNET, DELNET, CALIBNET, BONET, PUNENET etc. were established but MYLIBNET was slightly different as well the remaining urban network were similar to each other whether resource or purpose. But MYLIBNET was a network that is rich in information resource. Most types of information resources on any subject can be found here, if is received on food, sericulture, reading and hearing, pharmacy, destiny, polymer, medicine, archeology, Indian languages and engineering, on any subject. No other city has so many information resources available in so many disciplines simultaneously. Due to this feature, NISAT established it and is running CFTRI, i e central food technology research institute, which is an active member of MCLC (Mysore city library consortium) from its preaching. for this reason, MYLIBNET is working together with MCL.

#### **6.6 MADRAS LIBRARY NETWORK (MALIBNET):**

MALIBNET is a national institute of the government of Tamil Nadu formed in 1993 to established network between libraries and information center in Tamil Nadu and courage participation among member at present, more than 83 libraries and 37 educational and research institution have been added as institutional member of MALIBNET with full support.

Like other national networks, MALIBNET work to encourage resource sharing between libraries and research institute located in its region. One of them is a database of currently running serial directories available in 30 libraries of madras and other is constantly updating the database of the content of 300 journal document available in the libraries of madras. Both these database have also been put on the network for online viewing and use.

#### **7. DIVERSIFIED DATA NETWORK ESTABLISHED IN INDIA:**

In the field of data network, India has established several networks in the last two decades. The following network has been established by the department of telecommunication, Government of



India.

### **7.1 INDONET:**

INDONET is a first data communication and computer network in India which started in March 1986. It was organized by the CMC of India, i.e. computer Mentorship Corporation, which launched this network as India first commercial computer communication network. At that time, the rapid process of national information resources and the result of that process, the need to transmit the result to various institutions were very much felt. INDONET emerged as the first solution to this problem.

The CMC computer that large organization use to process their data. INDONET provides large scale data processing facilities to that organization. Its value added services network is a data network that x.25 and TCP/IP transmit both types of network protocols. It is located in 9 cities in India in the first place it was established in Mumbai, Calcutta and Chennai, then later it was also established in Delhi and Hyderabad. Presently, in addition to these cities, it is also located in Bangalore ,Ahmadabad , Shillong and Pune cities and each location has RISC based services.

In currently, INDONET has an international gate way that provides INDONET users with access to the world packet ready network such as the united – states of America (GNS) and the Internet.

### **7.2 VIKRAM (I- NET)**

It is a packet switched public data network based on x25 protocol to a department called Bhafia Sanchar Nigam Limited of India. It facilities the needs of very effective and reliable networking. It is available in 102 cities in India.

It provides facility for transfer of National data which is comparatively frugal and reliable. It is a packet-switched data network that has the advantages that it can transmit calls on this network to different routes flawlessly, making the information available in any form at the fastest possible speed. It also connects different computers at different speed with different speeds.

In its first phase of establishment it was earlier established only in New Delhi, Mumbai, Calcutta, Chennai, Bangalore, Pune, Kanpur and Ahmadabad and after successfully operating other major cities of India. 6 Kilobytes per second were added.

### **7.3 OPEN EDUCATION NETWORK (OPENNET):**

As the name itself suggest, this network is an open network of open universities functioning in India, i.e. it is made up of open universities to participate and educational resource of open universities.

Presently, open universities and distance education in India have become very popular over the year. The system of open universities and distance education was made for same reason that education is a fundamental requirement ad it must be met by every person of the nation, however can

person has their own individual circumstance before which is open universities is a system that provides education to a person from a remote place is and for which the person does not have to go to class is also provided to the person to complete education. It is a system through which the deprived by the circumstance, the only difference is that through providing distance education, the ordinary formal the means of providing education are different.

#### **7.4 NATIONAL INFORMATION CENTER NETWORK (NICNET):**

NICNET was originally set up to provide information services through satellite to the department and organization of the Indian central government. It assets in information management for the govt. of India and the capital sector. The network, run by the national informatics center, basically connects and set up the network technologies organization. It provides beneficial services such as e-mail, database access, internet etc.

The network is made up of a master earth station, and a geosynchronous satellite. Its master earth station is located in the CGO complex of Delhi. It has 13 meter antennas and a network control center and support switch information. Consisting of these technical parts is also received and broadcast from the satellite.

NICNET also provides computer aided design and management when required. It sends information at a fast speed of 1200 VPS (second on bytes) while the speed of receiving information is 192 KVP (second kilo byte).

Currently, NICNET is using intellacet-Vsateillte to provide its services. This satellite act like a relay (broadcast center) station and micro earth station.

Till date, NICNET has around 500 hoods across the country, which is also helping to computerize every government sector and wake up the remaining sector from computerization information from NICNET helps a lot in conducting social-economic studies. This is given the government sector a powerful basis for making future plans and for decision making.

Te national information center located in New Delhi also conducts research in related fields.

#### **7.5 SCIENTIFIC AND INDUSTRIAL NETWORK (SARNET):**

It is a project of INSDOC (Indian national scientific documentation center) based on networking of the laboratories of CSIR (Council of scientific and industrial research) located in the nation.

It has been in operation since Dec 1989. It is connected to other research center of India. The main objectives of its establishment is to spread the widely spread information and technical sources an Indian to the national laboratories and research centers so that they can fully share resources using high technology among themselves. It truly wants to connect with the vastly spread library system in the nation so that this scientific community can get better international support as well and its can also connect to the international scientific community online through the national library system.

## 7.6 EDUCATION AND RESERACH NETWORK (ERNET):

ERNET is a government of India network which is fully connected in the field of science and technology. This network has a valuable contribution in the field of networking in India. This is what brought the internet to India practically, and practically ERNET in the field of information networking.

The ERNET was established in 1986 by the Indian department of power in collaboration with UNDP (United nation development program) and the central government since then, it has become an example in the field of networking in India due to its continuous functioning even the Indian government is providing financial support by incorporating it in the 9th five-year plan, since its inception, large institution have been associated with it-

- 1) SCST Mumbai (National institute technology center)
- 2) IISC, Bangalore (Indian institute of science)
- 3) 5 IIT centers (Delhi, Mumbai, Kanpur, kharag plus and madras)
- 4) Indian department of power, New Delhi

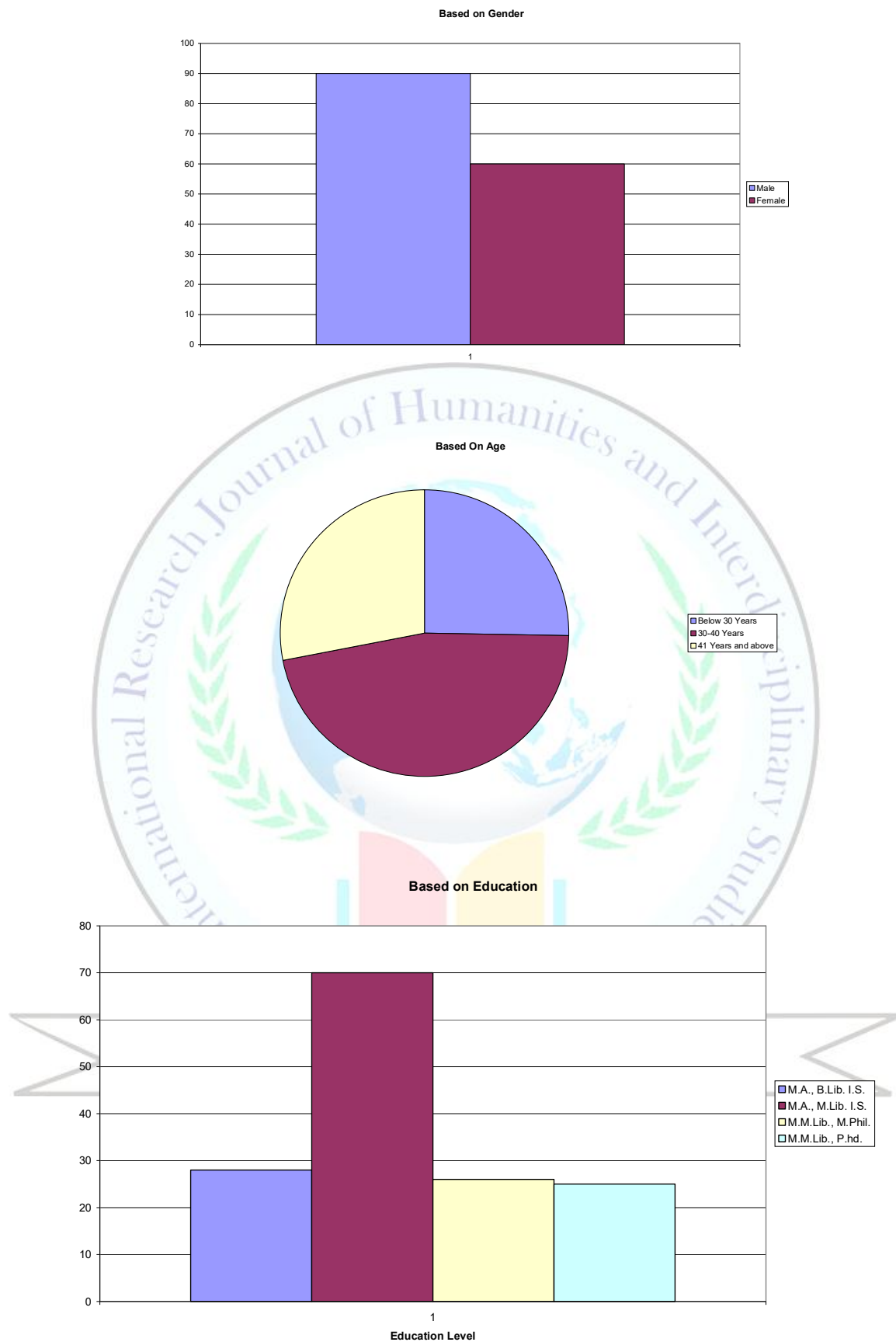
Initially, ERNET used both the TCCP/IP protocol and the OSI/IP protocol. Currently all types of protocol traffic runs on ERNET.

**Table – 1 General Description of respondent network users**

Element	Classification	No. of respondents	Percentage
Gender	Male	90	60.00%
	Female	60	40.00%
Age	Below 30 Years	38	25.33%
	30-40 Years	70	46.67%
	41 Years and above	42	28.00%
Educational level	M.A., B.Lib. I.S.	28	18.67%
	M.A., M.Lib. I.S.	71	47.33%
	M.Lib., M.Phil.	26	17.33%
	M.Lib., Ph.D	25	16.67%



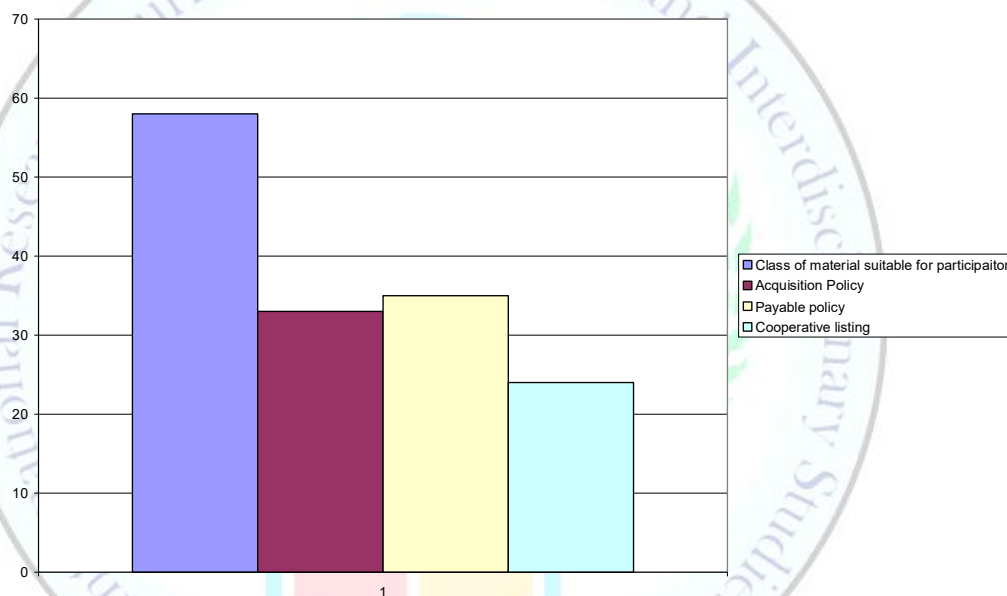
**PIC: 1**



**Table 2 Membership of Library Networks Resource Sharing Collaborative trend percentage of resource participation in modern networking.**

S.No.	Benefits of Collaborative Approach	No. of Users	Percentage
A	Class of material suitable for participation	58	38.67%
B	Acquisition Policy	33	22.00%
C	Payable policy	35	23.33%
D	Cooperative listing	24	16.00%
	Total	150	100%

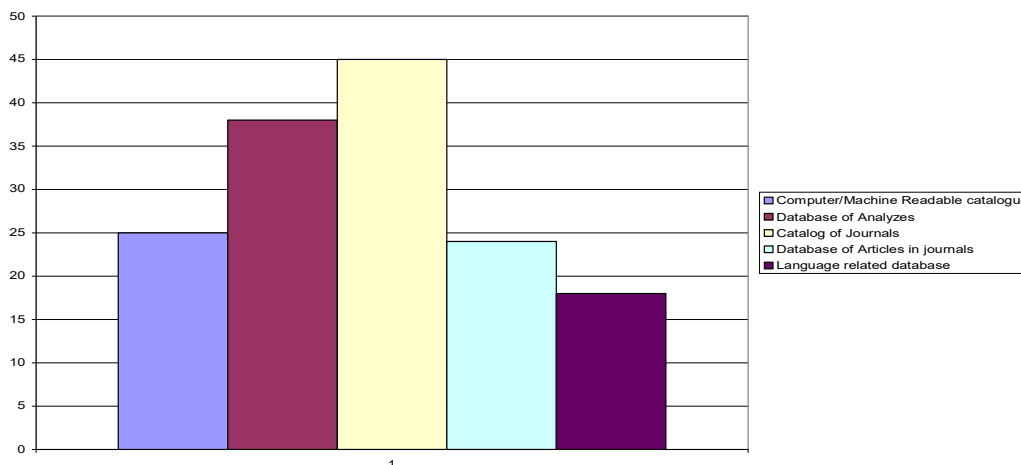
**PIC: 2**



**Table – 3 Networking Expansion Trend**

Sr. No.	Networking Expansion	No. of Users	Percentage
A	Computer/Machine Readable catalogue	25	16.67%
B	Database of Analyzes	38	25.33%
C	Catalog of Journals	45	30.00%
D	Database of Articles in journals	24	16.00%
E	Language related database	18	12.00%
	Total	150	100%

PIC: 3



### CONCLUSION:

Although research work is an endless and long running continuous process, every research work reaches its own decision and achieves the ultimate form; the findings are obtained from the researcher study, estimate and research survey. The researcher tries to reach the definitive result of the research work by using various statistical techniques and methods and analyzing and interpreting the result obtained through questionnaires and published and unpublished secondary ones. Research studies pave the way for received results. The presented chapter is organized keeping in mind the same result and aims of the research study. It is a well known fact that the progress of any nation is directly related to the abundance of knowledge and types of information resources available in that nation will be socially, economically, politically and culturally less than other countries of the world which will prove to be that nation will if a nation is using it available resources in a better and appropriate time in a proper manner, even if the nation is not rich in resources, it will be developing faster than other nations of the world.

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